

ABSTRACT

A heat exchanger apparatus for use with a tumble dryer. The apparatus includes a heat exchanger core portion that has hot air passageway that is
5 connected to a tumble dryer exhaust and receives a volume of hot humid air. The hot air passageway has a first heat exchange area. An ambient air passageway has an inlet opening that receives a volume of ambient air and has a second heat exchange area that is in contact with the first heat exchange area and is generally orthogonal relative to it. The ambient air is drawn into the
10 second heat exchange area and is heated by the hot air moving in the first heat exchange area. Both passageways are disposed in the heat exchanger core, which is sufficiently narrow to fit into a limited area surrounding the tumble dryer.